

BID ITEMS

Contract Item No. 1.1: Mobilization

1. Lump sum cost to mobilize/demobilize labor, materials, tools and equipment to perform the work shown, specified, or directed by the City.
2. No measurement shall be made for mobilization.
3. Lump sum cost for mobilization shall include, but not be limited to:
 - bonds,
 - insurance,
 - demobilization,
 - remobilization to complete work,
 - progress photographs,
 - time required to obtain permits,
 - meetings,
 - shop drawings,
 - record drawings,
 - and any other incidental items required prior to commencement of construction
4. Payment will be divided equally into 2 payments (50% for the first month and 50% of the second month).

Contract Item No. 1.2: Mobilization for Milling and Paving

1. Payment for mobilization for milling and paving shall be made at the unit price bid per each mobilization for milling and paving.
2. No measurement shall be made for mobilization for milling and paving.
3. Lump sum cost for mobilization shall include, but not be limited to:
 - mobilization to complete work
 - demobilization,
 - and any other incidental items required prior to commencement of construction
4. Payments will be made each time contractor mobilizes for milling and paving.

Contract Item No. 1.3: Construction Surveying

1. Lump sum cost to provide all construction survey, layout, staking required to perform the work shown, specified or directed by the City. Construction Surveying shall also include as built drawings.
2. No measurement shall be made for construction survey.
3. Payment will be divided equally into 10 monthly payments (1/10th of the value for ten monthly “Request for Payments”) for the duration of the contract. This is based on an assumed 10 month schedule.

Contract Item No. 1.4: Erosion and Sediment Control Measures

1. Lump sum cost to furnish all materials, labor, materials, tools and equipment to perform the erosion and sediment control work shown, or directed by the City E and S inspector.
2. No measurement shall be made for erosion and sediment control.
3. Lump sum cost for erosion and sediment control shall include, but not be limited to:
 - Inlet Protection
 - Hay bales
 - Erosion control mulch
 - Protective covering EC-2
 - Additional measures as required by the E and S inspector
 - installation,
 - maintenance of erosion and sediment control measures
 - removal and disposal of erosion and sediment control measures upon completion,
 - and other incidental items required for the installing, maintaining and removing of erosion and sediment control measures.
4. Payment will be fifty percent (50%) of the bid item for erosion and sediment control may be made on the first “Request for Payment”. The final 50% will be paid on the last “Request for Payment”.

Contract Item No. 1.5: Demolition

1. Lump sum cost to furnish, and install all material and labor, equipment and tools to perform the demolition work shown, specified, or directed by the City.
2. Measurement shall be made for demolition work completed.

3. Lump sum cost for demolition shall include, but not be limited to:
 - Removal of concrete, asphalt, curb, curb and gutter, pavers and other ground materials
 - Removal of signs, street furniture,
 - Removal of trees, stumps, and plant material
 - Hauling and disposal of all material in an appropriate manner
 - Hauling of salvaged items
 - and other incidental demolition items required for the installation of site improvements.
4. Payment will be made by divided into (8) monthly payments. ($1/8^{\text{th}}$ of the value for eight monthly “Request for Payments”) for the duration of the contract. This is based on 4 blocks of work, 2 sides each block. No payment will be made if no demolition work has been started on the block at the time of the pay application.

Contract Item No. 1.6: Maintenance of Traffic

1. Lump sum cost to furnish, and install all material and labor, equipment and tools to perform the maintenance of traffic work shown, specified, directed by the City, or required by the Virginia Work Area Protection Manual, latest addition.
2. No measurement shall be made for maintenance of traffic.
3. Lump sum cost for maintenance of traffic shall include, but not be limited to:
 - Furnish and install barriers
 - Furnish and install temporary signs
 - Furnish and install temporary striping
 - VDOT certified flaggers,
 - and other incidental items required for the installing, maintaining and removing of temporary traffic control measures.
4. Payment will be divided equally into 10 monthly payments ($1/10^{\text{th}}$ of the value for eight monthly “Request for Payments”) for the duration of the contract. This is based on an assumed 10 month schedule.

Contract Item No. 1.7: Unsuitable Soil Excavation

1. Payment for additional excavation outside structure or trench limits, as directed by the City shall be made at the unit price bid per cubic yard.
2. Measurement shall be for compacted material, in-place as directed in writing by the City.

3. The unit price bid shall include all labor, materials, tools, equipment and services for excavating materials at the locations directed by the City and furnishing, installing and compacting fill including, but not limited to:
 - excavating, storage and disposal of excess and unsuitable materials,
 - trench support,
 - transportation and hauling of material offsite
 - compaction,
 - dewatering,
 - and any other incidental items required for the proper completion of the work.
- Rock excavation is not included in this pay item.
- Test pitting and test holes indicated on the Contract Drawings are excluded from this bid item.

Contract Item No. 1.8: Offsite Borrow and Backfill

1. Payment for furnishing and placing borrow material (obtained offsite) will be made at the unit price bid per cubic yard. Measurement shall be for material, compacted, in-place as directed in writing by the City.
2. Measurement will be made by measuring the length, width and depth of the excavation.
3. The unit price bid shall include all labor, materials, tools, equipment and services for furnishing and placing borrow material including, but not be limited to:
 - excavation,
 - disposal of unsuitable materials,
 - transportation,
 - placing of borrow material,
 - compaction,
 - dewatering,
 - and any other incidental items required for the proper backfill.
4. The Select Fill used within the trench limits is excluded from this bid item.

BID ITEMS

Contract Item No. 2.1: Storm Sewer Pipe

- a. 4-inch Diameter PVC Drain Pipe
 - b. 6-inch Diameter PVC Drain Pipe
 - c. 15-inch Diameter High Density Polyethylene Pipe (HDPE)
 - d. 18-inch Diameter High Density Polyethylene Pipe (HDPE)
 - e. 24-inch Diameter High Density Polyethylene Pipe (HDPE)
1. Payment for furnishing and installing the specified storm sewer shall be made at the unit price bid per linear foot for each size and type actually installed.
 2. Measurement of lengths for PVC Drain Pipe will be made horizontally, along the centerline of pipe, from center to center of connection point. Measurement of lengths for HDPE will be made horizontally, along the centerline of pipe, from center to center of manhole.
 3. The unit price bid per linear foot shall include all labor, materials, tools, equipment, and services for furnishing and installing the specified storm sewer including, but not limited to:
 - furnishing and installing pipe and fittings,
 - connections,
 - surveying, layout, and measurement,
 - temporary controls and facilities,
 - traffic control measures,
 - pavement removal and disposal,
 - test pitting existing utilities,
 - unclassified excavation,
 - excavation and storage of excavated materials,
 - clearing and grubbing,
 - excavation and offsite disposal of unsuitable material,
 - bedding , backfill, and compaction
 - full backfill from the invert of the pipe to pavement or sidewalk,
 - temporary pavement patch on Main Street,
 - removal of existing abandoned water main if in conflict,
 - plugging of remaining existing abandoned water main,
 - demolition of existing drop inlet as shown on plans,
 - restoration of Memorial Drive and other areas to remain in place,
 - trench support,
 - dewatering,
 - field quality control,
 - and any other incidental items required for the proper installation and operation of the storm sewer.

Contract Item No. 2.2: Downspout Adapter

1. Payment for furnishing and installing downspout adapters at locations as shown on the plans shall be made at the unit price bid per each for each downspout adapter actually installed.
2. Measurement will be made per each downspout adapter installed.
3. The unit price bid per each shall include all labor, materials, tools, equipment and services for furnishing and installing downspout adapters at locations as shown on the plans including, but not limited to:
 - furnishing and installing downspout adapters,
 - connections to existing piping,
 - fittings,
 - surveying, layout, and measurement,
 - traffic control measures,
 - pavement removal and disposal,
 - trench support,
 - unclassified excavation,
 - excavation and offsite disposal of unsuitable material,
 - backfill and compaction,
 - handling,
 - and any other incidental items required for the proper installation and operation of the downspout adapters.

Contract Item No. 2.3: 4-inch Diameter Cleanout

1. Payment for furnishing and installing the specified cleanouts shall be made at the unit price bid per each for each cleanout actually installed.
2. Measurement will be made per each cleanout installed at the locations shown on the plans.
3. The unit price bid per each shall include all labor, materials, tools, equipment and services for furnishing and installing the specified cleanouts including, but not limited to:
 - furnishing and installing cleanouts,
 - surveying, layout, and measurement,
 - traffic control,
 - unclassified excavation,
 - excavation and storage of excavated materials,
 - excavation and offsite disposal of unsuitable material,
 - bedding, backfill, and compaction,
 - trench support,
 - dewatering,
 - and any other incidental items required for the proper operation of the cleanouts.

Contract Item No. 2.4: Connect to Existing Manhole

1. Payment for Connecting to Existing Manhole as indicated on the plans shall be made at the lump sum price.
2. Measurement will be made on a lump sum basis for Connecting to Existing Manhole at the location shown on the plans.
3. The lump sum price bid shall include all labor, materials, tools, equipment and services for Connecting to Existing Manhole including, but not limited to;
 - surveying, layout, and measurement,
 - manhole support,
 - repair of manhole where damaged by construction,
 - connection to proposed pipe,
 - abandonment of existing pipe identified to be abandoned,
 - brick and mortar closure of existing hole to be abandoned,
 - and any other incidental items required for the proper operation of the manhole and storm sewer.

Contract Item No. 2.5: Curb Drop Inlet

- a. Curb Drop Inlet, L=10 feet
 - b. Curb Drop Inlet, L=12 feet
 - c. Curb Drop Inlet, L=14 feet
1. Payment for furnishing and installing curb drop inlets shall be made at the unit price bid per each for each size curb drop inlet actually installed.
 2. Measurement will be made per each curb drop inlet installed at the locations shown on the plans.
 3. The unit price bid per each shall include all labor, materials, tools, equipment and services for furnishing and installing the curb drop inlets including, but not limited to;
 - manhole structure beneath drop inlet,
 - frame and cover,
 - inlet shaping,
 - proposed pipe connections,
 - unclassified excavation,
 - storage and disposal of excavated materials,
 - excavation and offsite disposal of unsuitable materials,
 - backfill and compaction,
 - surveying, layout, and measurement,
 - traffic control,
 - installation in accordance with the appropriate details,

- and any other incidental items required for the proper installation of the curb drop inlets.

Contract Item No. 2.6: Storm Sewer Manhole

1. Payment for furnishing and installing storm sewer manholes shall be made at the unit price bid per vertical foot of storm sewer manhole actually installed.
2. Measurement will be made per vertical foot of storm sewer manhole installed at the locations shown on the plans, measured from the invert elevation of the outlet pipe to the top of the concrete structure.
3. The unit price bid per vertical foot shall include all labor, materials, tools, equipment and services for furnishing and installing the storm sewer manholes including, but not limited to;
 - unclassified excavation,
 - storage and disposal of excavated materials,
 - excavation and offsite disposal of unsuitable materials,
 - backfill and compaction,
 - surveying, layout and measurement,
 - traffic control,
 - excavation support,
 - connections to proposed pipes,
 - testing,
 - installation in accordance with the appropriate details,
 - and any other incidental items required for the proper installation of the storm sewer manholes.

Contract Item No. 2.7: Manhole Frame & Cover

1. Payment for furnishing and installing frames & covers shall be made at the unit price bid per each for each type of frame & cover actually installed.
2. Measurement will be made per each frame & cover installed at the locations shown on the plans.
3. The unit price bid per each shall include all labor, materials, tools, equipment and services for furnishing and installing the frames & covers including, but not limited to;
 - surveying, layout, and measurement,
 - traffic control,
 - installation in accordance with the frame & cover details,
 - and any other incidental items required for the proper installation of the frames & covers.

Contract Item No. 2.8: Roof Leader Sidewalk Drain

1. Payment to furnish and install Roof Leader Sidewalk Drains shall be made at the unit price bid per each for the number of Roof Leader Sidewalk Drains actually installed.
2. Measurement will be made per each Roof Leader Sidewalk Drain at the locations shown on the plans.
3. The unit price bid per each shall include all labor, materials, tools, equipment and services to furnish and install Roof Leader Sidewalk Drains including, but not limited to:
 - downspout adapter, pipe, fittings, and connections,
 - trench drain and grate,
 - concrete removal and replacement,
 - unclassified excavation,
 - storage and disposal of excavated materials,
 - excavation and offsite disposal of unsuitable materials,
 - backfill and compaction,
 - surveying, layout, and measurement,
 - traffic control,
 - installation in accordance with the appropriate standard detail,
 - and any other incidental items required for the proper installation and operation of the curb cut roof drains.

Contract Item No. 2.9: Trench Drains

1. Payment to furnish and install Trench Drains shall be made at the unit price bid per each for the number of Roof Leader Sidewalk Drains actually installed.
4. Measurement will be made per each Trench Drain at the locations shown on the plans.
5. The unit price bid per each shall include all labor, materials, tools, equipment and services to furnish and install trench drains including, but not limited to:
 - downspout adapter, pipe, fittings, and connections,
 - trench drain and grate,
 - concrete removal and replacement,
 - unclassified excavation,
 - storage and disposal of excavated materials,
 - excavation and offsite disposal of unsuitable materials,
 - backfill and compaction,
 - surveying, layout, and measurement,
 - traffic control,
 - installation in accordance with the appropriate standard detail,
 - and any other incidental items required for the proper installation and operation of the drains.

Contract Item No. 2.10: Adjust Existing Frame and Cover

1. Payment to adjust existing manholes frame and cover shall be made at the unit price bid per each adjusted.
2. Measurement will be made per each adjusted.
3. The unit price bid per each shall include all labor, materials, tools, equipment and services to furnish and install trench drains including, but not limited to:
 - Demolition of existing structure
 - All materials for resetting.
 - traffic control,
 - installation in accordance with the appropriate standard detail,
 - and any other incidental items required for the proper adjustment.
4. The quantity for this item is for the electric manholes in the sidewalk will be need to be reset. This pay item shall apply to any existing manhole.

Contract Item No. 2.11: Adjust Existing Gas Meter Box

1. Payment to adjust existing gas meter boxes shall be made at the unit price bid per each adjusted.
2. Measurement will be made per each adjusted.
3. The unit price bid per each shall include all labor, materials, tools, equipment and services to furnish and install trench drains including, but not limited to:
 - Excavation prior to adjustment
 - All materials and labor for resetting.
 - installation in accordance with the appropriate standard detail,
 - and any other incidental items required for the proper adjustment.

Contract Item No. 2.12: Adjust Existing Water Meter Box

1. Payment to adjust existing water meter boxes shall be made at the unit price bid per each adjusted.
2. Measurement will be made per each adjusted.
3. The unit price bid per each shall include all labor, materials, tools, equipment and services to furnish and install trench drains including, but not limited to:
 - Excavation prior to adjusting
 - All labor and materials for resetting.
 - installation in accordance with the appropriate standard detail,
 - and any other incidental items required for the proper adjustment.
4. Water Valve boxes will be included in this unit price as well.

BID ITEMS**Contract Item No. 3.1: Additional 3000 psi Concrete – A3**

1. Payment for furnishing and placing incidental concrete will be made at the unit price bid per cubic yard.
2. Measurement shall be per cubic yard of concrete, in-place as required by the Standard Details and directed by the City.
3. The unit price bid shall be full compensation for all labor, materials, tools and equipment necessary required by the Standard Details including, but not limited to:
 - purchasing, shipping and storing materials
 - erecting and removing forms,
 - placing reinforcing,
 - pouring and finishing concrete
 - and any other incidental items required for proper installation of the concrete.

Contract Item No. 3.2: Base Stone Aggregate (21A)

1. Payment for furnishing and placing base stone aggregate will be made at the unit price bid per ton. Measurement shall be for VDOT No. 21A material, compacted, in-place as directed in writing by the City.
2. Payment will be made for this item for each ton of material actually installed verified by load tickets provide by the stone supplier for each load.
3. The unit price bid shall include all labor, materials, tools, equipment and services for furnishing and placing material including, but not be limited to:
 - purchasing, shipping and storing materials
 - excavating and disposal of excess and unsuitable materials,
 - placing of select material,
 - compaction,
 - dewatering,
 - and any other incidental items required for the proper installation.

Contract Item No. 3.3: Flexible Pavement Planning

1. Payment for milling of roadway surface course shall be made at the unit price bid per ton. Mill depths vary per plans.

2. Measurement will be made by averaging the first five trucks and counting trucks after the first 5.
3. The unit price bid shall include all labor, materials, tools, equipment and services including, but not limited to:
 - milling of existing pavement
 - clean up of milled material
 - excavating, storage and disposal of milled and excavated materials,
 - if needed, pavement saw cutting and removal shall be incidental and shall be included in the quoted price per square yard.
 - and any other incidental items required for the proper replacement.

Contract Item No. 3.3A: Concrete Pavement Planning

1. Payment for milling of roadway surface course shall be made at the unit price bid per square yard. Assume mill depth will be 1”.
2. Measurement will be made measuring the area of concrete milled. If a milled area is deeper than 1” the square yard area will be multiplied by the depth. (ie, 2” mill depth, area of 2” mill will be multiplied by 2, all other areas by 1.)
3. The unit price bid shall include all labor, materials, tools, equipment and services including, but not limited to:
 - milling of existing pavement
 - clean up of milled material
 - excavating, storage and disposal of milled and excavated materials,
 - if needed, pavement saw cutting and removal shall be incidental and shall be included in the quoted price per square yard.
 - and any other incidental items required for the proper replacement.

**Contract Item No. 3.4: Asphalt Concrete Surface Course (VDOT SM-9.5A)
(1.5-inches)**

1. Payment for replacement of roadway surface course shall be made at the unit price bid per ton for installing roadway surface course replacement. This item shall apply to permanent pavement.
2. Measurement will be made taken from asphalt tickets.
3. The unit price bid shall include all labor, materials, tools, equipment and services including, but not limited to:
 - purchasing, shipping and storing materials
 - excavating, storage and disposal of excavated materials, including temporary pavement,

- placing of pavement,
 - if needed, pavement saw cutting and removal shall be incidental and shall be included in the quoted price per square yard.
 - and any other incidental items required for the proper replacement of the paving.
4. Tack and liquid binder shall not be paid for separately but shall be included in the unit price per ton. However, price adjustment will be permitted for liquid binder using the VDOT method.

Contract Item No. 3.5: Asphalt Concrete Base Pavement (BM-25.0)

1. Payment for replacement of roadway base asphalt shall be made at the unit price bid per ton of asphalt concrete base pavement. This item shall apply to permanent pavement repair per the City Standard Detail Number P 1.0 and VDOT-OCPR detail included.
2. Measurement will be made with asphalt tickets.
3. The unit price bid shall include all labor, materials, tools, equipment and services including, but not be limited to:
 - purchasing, shipping and storing materials
 - excavating, storage and disposal of excavated materials, including temporary pavement,
 - placing of pavement,
 - if needed, pavement saw cutting and removal shall be incidental and shall be included in the quoted price per square yard.
 - and any other incidental items required for the proper replacement of the paving.
4. Tack and liquid binder shall not be paid for separately but shall be included in the unit price per ton. However, price adjustment will be permitted for liquid binder using the VDOT method.

Contract Item No. 3.6: Custom Curb – 4” Reveal

1. Payment for concrete curb shall be made at the unit price bid per linear foot for the length of curb actually installed. This item shall apply to concrete curb per the detail included.
2. Measurement shall be made horizontally along the length of the curb.
3. The unit price bid shall include all labor, materials, tools, equipment and services including, but not limited to:
 - construction per detail

- excavation and backfill,
- erecting and removing forms,
- erecting and removing radial forms
- placing reinforcing,
- pouring concrete,
- furnishing and installing asphalt between new curb and existing pavement,
- and any other incidental items required for the proper installation.

Contract Item No. 3.7: Concrete Curb and Gutter

1. Payment for concrete curb and gutter shall be made at the unit price bid per linear foot for the length of curb and gutter actually installed. This item shall apply to concrete curb and gutter per the detail included.
2. Measurement shall be made horizontally along the length of the curb and gutter.
3. The unit price bid shall include all labor, materials, tools, equipment and services including, but not limited to:
 - construction per detail, VDOT CG-6
 - excavation and backfill,
 - erecting and removing forms,
 - erecting and removing radial forms
 - placing reinforcing,
 - pouring concrete,
 - furnishing and installing asphalt between new curb and gutter and existing pavement,
 - and any other incidental items required for the proper installation.

Contract Item No. 3.8: Commercial Entrance CG-9A

1. Payment for a commercial entrance shall be made at the unit price bid per square yard actually installed. This item shall apply to entrance per the detail included.
2. Measurement shall be made by multiplying the length of the entrance by the width of the entrance installed.
3. The unit price bid shall include all labor, materials, tools, equipment and services including, but not limited to:
 - construction per detail
 - excavation and backfill,
 - erecting and removing forms,
 - placing reinforcing,

- pouring concrete,
- furnishing and installing asphalt between new entrance and existing pavement,
- and any other incidental items required for the proper installation.

Contract Item No. 3.9: Commercial Entrance CG-9B

1. Payment for a commercial entrance shall be made at the unit price bid per square yard actually installed. This item shall apply to entrance per the VDOT standard detail.
2. Measurement shall be made by multiplying the length of the entrance by the width of the entrance installed.
3. The unit price bid shall include all labor, materials, tools, equipment and services including, but not limited to:
 - construction per detail
 - excavation and backfill,
 - erecting and removing forms,
 - placing reinforcing,
 - pouring concrete,
 - furnishing and installing asphalt between new entrance and existing pavement,
 - and any other incidental items required for the proper installation.

Contract Item No. 3.10: Commercial Entrance CG-9A with Brick

1. Payment for a commercial entrance with brick shall be made at the unit price bid per square yard actually installed. This item shall apply to entrance per the detail included.
2. Measurement shall be made by multiplying the length of the entrance by the width of the entrance installed.
3. The unit price bid shall include all labor, materials, tools, equipment and services including, but not limited to:
 - construction per detail
 - excavation and backfill,
 - erecting and removing forms,
 - placing reinforcing,
 - pouring concrete,
 - brick paving
 - all mortar and setting beds
 - joint sand

- furnishing and installing asphalt between new entrance and existing pavement,
- and any other incidental items required for the proper installation.

Contract Item No. 3.11: Brick Sidewalk at Entrance Ramp

1. Payment to furnish and install brick sidewalk on concrete behind the commercial entries, shall be made at the unit price bid per square yard for the area of sidewalk actually installed.
2. Measurement shall be made by multiplying the length of the sidewalk by the width of the sidewalk installed.
3. The unit price bid shall include all labor, materials, tools, equipment and services including, but not limited to:
 - construction per detail
 - purchasing, shipping and storing materials
 - excavation and backfill,
 - erecting and removing forms,
 - placing reinforcing,
 - pouring concrete,
 - sand setting bed
 - joint sand
 - brick paving
 - layout and cutting of pavers
 - and any other incidental items required for the proper installation.

Contract Item No. 3.12: Truncated Dome Pavers

1. Payment to furnish and install truncated dome pavers shall be made at the unit price bid per square foot of truncated dome pavers actually installed.
2. Measurement shall be made by multiplying the length of the truncated dome pavers by the width of the installed.
3. The unit price bid shall include all labor, materials, tools, equipment and services including, but not limited to:
 - construction per detail
 - purchasing, shipping and storing materials
 - excavation and backfill,
 - truncated dome pavers
 - sand setting bed
 - joint sand
 - layout of pavers
 - cutting of pavers

- and any other incidental items required for the proper installation.

Contract Item No. 3.13: Thermoplastic Crosswalk

1. Payment to furnish and install thermoplastic crosswalks 2' wide shall be made at the unit price bid per square foot for the area of thermoplastic actually installed.
2. Measurement shall be made by multiplying the length of the thermoplastic by the width installed.
3. The unit price bid shall include all labor, materials, tools, equipment and services including, but not limited to:
 - construction per VDOT thermoplastic specifications
 - purchasing, shipping and storing materials
 - install all thermoplastic
 - layout
 - and any other incidental items required for the proper installation.

Contract Item No. 3.14: 4" Concrete Sidewalk

1. Payment for concrete sidewalk shall be made at the unit price bid per square yard for the area of sidewalk actually installed.
2. Measurement shall be made by multiplying the length of the sidewalk by the width of the sidewalk installed.
3. The unit price bid shall include all labor, materials, tools, equipment and services including, but not limited to:
 - construction per detail
 - excavation and backfill,
 - erecting and removing forms,
 - placing reinforcing,
 - pouring concrete
 - concrete tint
 - and any other incidental items required for the proper installation.

Contract Item No. 3.15: Brick Paving

1. Payment to furnish and install brick sidewalk shall be made at the unit price bid per square yard for the area of sidewalk actually installed.

2. Measurement shall be made by multiplying the length of the sidewalk by the width of the sidewalk installed.
3. The unit price bid shall include all labor, materials, tools, equipment and services including, but not limited to:
 - construction per detail
 - purchasing, shipping and storing materials
 - excavation and backfill,
 - erecting and removing forms
 - pouring and finishing concrete
 - sand setting bed
 - joint sand
 - layout of pavers
 - cutting of pavers
 - resetting water meter and valve boxes
 - and any other incidental items required for the proper installation.

Contract Item No. 3.16: Concrete Unit Paving

1. Payment to furnish and install concrete unit paver accent shall be made at the unit price bid per square yard for the area of concrete unit paver accent actually installed.
2. Measurement shall be made by multiplying the length by the width of the concrete unit paver accent installed.
3. The unit price bid shall include all labor, materials, tools, equipment and services including, but not limited to:
 - construction per detail
 - purchasing, shipping and storing materials
 - excavation and backfill,
 - erecting and removing forms,
 - placing reinforcing,
 - pouring and finishing concrete under pavers
 - sand setting bed
 - joint sand
 - layout of pavers
 - cutting of pavers
 - and any other incidental items required for the proper installation.

Contract Item No. 3.17: Reclaimed Cobble Paving

1. Payment for salvaged granite cobble shall be made at the unit price bid per square yard for the area of sidewalk actually installed.

2. Measurement shall be made by multiplying the length by the width of the salvaged cobble installed.
3. The unit price bid shall include all labor, materials, tools, equipment and services including, but not limited to:
 - construction per detail
 - excavation and backfill,
 - selection of stone from the City Public Works Yard
 - hauling material from the City Public Works Yard
 - pouring and finishing concrete
 - sand setting bed
 - joint sand
 - layout of pavers
 - cutting of pavers
 - and any other incidental items required for the proper installation.

Contract Item No. 3.18: Concrete Walk Over Coal Chute

1. Payment to furnish and install concrete sidewalk bridging shall be made at the unit price bid per square yard for the area of sidewalk bridging actually installed.
2. Measurement shall be made by multiplying the length by the width of the bridging installed.
3. The unit price bid shall include all labor, materials, tools, equipment and services including, but not limited to:
 - construction per detail
 - removal and replacement of any face brick or façade to accommodate concrete
 - erecting and removing forms,
 - expansion material
 - grout or sealants for face of building
 - placing reinforcing,
 - pouring concrete,
 - tinted concrete
 - and any other incidental items required for the proper installation.

Contract Item No. 3.19: Reset Existing Concrete Unit Pavers in Street

1. Payment for resetting concrete unit pavers in the street shall be made at the unit price bid per square yard for the area of pavers reset
2. Measurement shall be made by multiplying the length by the width of the pavers reset.

3. The unit price bid shall include all labor, materials, tools, equipment and services including, but not limited to:
 - lifting existing pavers
 - storing pavers
 - additional sand setting bed
 - joint sand
 - layout of pavers
 - cutting of pavers
 - and any other incidental items required for the proper installation.

Contract Item No. 3.20: Planter Curb - Salvaged Granite

1. Payment for salvaged granite planter curb shall be made at the unit price bid per linear foot of salvaged granite actually installed.
2. Measurement shall be made by measuring the length of salvaged installed.
3. The unit price bid shall include all labor, materials, tools, equipment and services including, but not limited to:
 - construction per detail
 - removing, transporting and salvaging existing granite curb
 - storing material
 - mortar for joints
 - layout of curb
 - installation
 - and any other incidental items required for the proper installation.

Contract Item No. 3.21: Cobble Planter Edge

1. Payment for salvaged granite planter curb shall be made at the unit price bid per linear foot of salvaged granite actually installed.
2. Measurement shall be made by measuring the length of salvaged cobble installed.
3. The unit price bid shall include all labor, materials, tools, equipment and services including, but not limited to:
 - construction per detail
 - excavation and backfill,
 - selection of stone from Public Works Yard
 - hauling material from the city Public Works Yard
 - sand setting bed
 - joint sand
 - layout of pavers

- cutting of pavers
- and any other incidental items required for the proper installation.

Contract Item No. 3.22: Trash Receptacle

1. Payment to furnish and install trash receptacles shall be made at the unit price bid per each actually installed.
2. Measurement shall be made by counting those actually installed.
3. The unit price bid shall include all labor, materials, tools, equipment and services including, but not limited to:
 - installation per detail
 - concrete footer
 - purchasing, shipping and storing materials
 - installation of receptacle
 - and any other incidental items required for the proper installation.

Contract Item No. 3.23: Bench

1. Payment to furnish and install benches shall be made at the unit price bid per each actually installed.
2. Measurement shall be made by counting those actually installed.
3. The unit price bid shall include all labor, materials, tools, equipment and services including, but not limited to:
 - installation per detail
 - concrete footer
 - purchasing, shipping and storing materials
 - installation of bench
 - and any other incidental items required for the proper installation.

Contract Item No. 3.24: Fence and Gate

1. Payment to furnish and install ornamental fence and gate shall be made at the unit price bid per linear foot installed.
2. Measurement shall be made by measuring the length of fence.
3. The unit price bid shall include all labor, materials, tools, equipment and services including, but not limited to:
 - purchasing, shipping and storing materials
 - concrete footings
 - installation of fence and gate

- and any other incidental items required for the proper installation.

Contract Item No. 3.25: Salvaged Granite Curb Bench

1. Payment for salvaged granite curb seat walls shall be made at the unit price bid per each installed.
2. Measurement shall be made by counting the number of seats installed.
3. The unit price bid shall include all labor, materials, tools, equipment and services including, but not limited to:
 - construction per detail
 - removing and salvaging existing granite curb
 - storing material
 - concrete footer
 - mortar for joints
 - placing and setting curb
 - installation
 - and any other incidental items required for the proper installation.

Contract Item No. 3.26: Bronze Plaques

1. Payment for bronze plaques shall be made at the unit price bid per each installed.
2. Measurement shall be made by counting the number installed.
3. The unit price bid shall include all labor, materials, tools, equipment and services including, but not limited to:
 - design and fabrication of the plaques
 - shipping and delivery of the plaque
 - installation and all materials for installation
 - and any other incidental items required for the proper installation.

Contract Item No. 3.27: One Sided Concrete Band

1. Payment for one sided concrete band shall be made at the unit price bid per linear foot for the length of concrete band actually installed. This item shall apply to the one sided concrete band per the detail included in the addenda.
2. Measurement shall be made horizontally along the length of the concrete band.
3. The unit price bid shall include all labor, materials, tools, equipment and services including, but not limited to:
 - construction per detail
 - excavation and backfill,
 - erecting and removing forms,
 - placing reinforcing,
 - pouring concrete,
 - furnishing and installing asphalt between the concrete band and existing pavement,
 - and any other incidental items required for the proper installation.

Contract Item No 3.28: Brick Crosswalks – ALTERNATE 1

1. Payment to furnish and install brick unit pavers in the street shall be made at the unit price bid per square yard for the area of pavers installed
2. Measurement shall be made by multiplying the length by the width of the pavers installed.
3. The unit price bid shall include all labor, materials, tools, equipment and services including, but not limited to:
 - installation per detail
 - purchasing, shipping and storing materials
 - joint sand
 - layout of pavers
 - cutting of pavers
 - and any other incidental items required for the proper installation.
4. Brick cross walks will be in lieu of thermoplastic.

Contract Item No. 3.28: Two Sided Concrete Band – Alternate 1

1. Payment for two sided concrete band shall be made at the unit price bid per linear foot for the length of concrete band actually installed. This item shall apply to the two sided concrete band per the detail included in the addenda.
2. Measurement shall be made horizontally along the length of the concrete band.
3. The unit price bid shall include all labor, materials, tools, equipment and services including, but not limited to:
 - construction per detail
 - excavation and backfill,
 - erecting and removing forms,
 - placing reinforcing,
 - pouring concrete,
 - furnishing and installing asphalt between the concrete band and existing pavement,
 - and any other incidental items required for the proper installation.

BID ITEMS

Contract Item Nos. 4.1 through 4.15: Plants as Listed

1. Payment for furnishing and installing the plants specified will be made at the unit price bid per each.
2. Measurement shall be made by counting actual plants installed.
3. The unit price bid shall include all labor, materials, tools, equipment and services including, but not limited to:
 - purchasing, shipping and storing materials
 - installation of material
 - all soil amendments, and bed preparation
 - watering through final completion
 - and any other incidental items required for proper installation and growth of plants.
4. All plants will be warranted for 1 year after substantial completion.

Contract Item No. 4.16: Tree Pits

1. Payment for furnishing and installing the tree pits as specified will be made at the unit price per each installed.
2. Measurement shall be made by counting actual tree pits installed.
3. The unit price bid shall include all labor, materials, tools, equipment and services including, but not limited to:
 - excavation and removal of existing soil
 - purchasing, shipping and storing materials
 - sorting hauling, and installation of salvaged cobble
 - all soil amendments, and bed preparation
 - and any other incidental items required for proper installation and growth of plants.

Contract Item No. 4.17: Seeding

1. Payment for furnishing and installing seed as specified will be made at the unit price for lump sum installed.
2. No measurement will be made.

3. The unit price bid shall include all labor, materials, tools, equipment and services including, but not limited to:
 - purchasing, shipping and storing materials
 - seed and installation of seed
 - installation mulch
 - watering
 - and any other incidental items required for proper installation and growth of plants.

Contract Item No. 4.18: Mulching

1. Payment for furnishing and installing mulch as specified will be made at the unit price for each cubic yard installed.
2. Measurement shall be made by multiplying the length by the width of the bed area where mulch is installed.
3. The unit price bid shall include all labor, materials, tools, equipment and services including, but not limited to:
 - purchasing, shipping and storing materials
 - installation mulch
 - and any other incidental items required for proper installation and growth of plants.

BID ITEMS

Contract Item No. 5.1: Salvage, Repair and Reset Light Poles

1. Payment for salvaging, repair, and resetting existing light poles as specified will be made at the unit price per each installed.
2. Measurement shall be made by counting light poles installed.
3. The unit price bid shall include all labor, materials, tools, equipment and services including, but not limited to:
 - Removal and transportation of existing poles
 - All repair, refinishing, and preparation for reinstallation
 - Re-installation of poles
 - and any other incidental items required for proper installation of the re-used light poles.
4. The city shall pull wire to the lights.

Contract Item No. 5.2: New Light Pole Foundations

1. Payment for new light pole foundations as specified will be made at the unit price per each installed.
2. Measurement shall be made by counting foundations installed.
3. The unit price bid shall include all labor, materials, tools, equipment and services including, but not limited to:
 - Layout and setting grades
 - Excavation for foundations
 - Formwork
 - Concrete
 - Reinforcing
 - Bolts, and bolt pattern layout materials
 - Conduit within 1' of the foundation and within the concrete
 - Grounding Rod and wire
 - Removing stripping forms
 - and any other incidental items required for proper installation of light poles foundations.

Contract Item No. 5.3: Conduit

1. Payment for conduit as specified will be made at the unit price per linear foot installed.
2. Measurement shall be made by measuring the horizontal distance installed.
3. The unit price bid shall include all labor, materials, tools, equipment and services including, but not limited to:
 - Layout
 - Excavation
 - Conduit, connectors, sweeps, fittings.
 - Labor to install
 - and any other incidental items required for proper installation of light poles foundations.

Contract Item No. 5.4: Junction Box

1. Payment for junction box as specified will be made at the unit price per each installed.
2. Measurement shall be made by counting the junction boxes installed.
3. The unit price bid shall include all labor, materials, tools, equipment and services including, but not limited to:
 - Layout
 - Excavation
 - Junction box, lid, connectors, fittings
 - Ground rods
 - Labor to install
 - and any other incidental items required for proper installation of light poles foundations.

Contract Item No. 5.5: New Globes for Existing Luminares

1. Payment for new globes as specified will be made at the unit price per each installed.
2. Measurement shall be made by counting each globe installed.
3. The unit price bid shall include all labor, materials, tools, equipment and services including, but not limited to:
 - Shipping and delivery
 - Storage
 - Installation
 - and any other incidental items required for proper installation of light globes

4. The model # for the globes is # A840-FA

Contract Item No. 5.6: New Signal Poles – Single Arm

1. Payment for new signal poles will be made for each installed. This pay item is for only signal poles with 1 arm on one pole.
2. Measurement shall be made by counting each installed.
3. The unit price bid shall include all labor, materials, tools, equipment and services including, but not limited to:
 - Removal and of existing poles
 - All bolts, connectors, fasteners for installation of new poles
 - Furnishing and installation of new poles
 - and any other incidental items required for proper installation of the new signal poles.

Contract Item No. 5.7: New Signal Poles – Double Arm

1. Payment for new signal poles will be made for each installed. This pay item is for only signal poles with 2 arms on one pole.
2. Measurement shall be made by counting each installed.
3. The unit price bid shall include all labor, materials, tools, equipment and services including, but not limited to:
 - Removal and of existing poles
 - All bolts, connectors, fasteners for installation of new poles
 - Furnishing and installation of new poles
 - and any other incidental items required for proper installation of the new signal poles.
4. Specification for the poles, arms and accessories shall be:
 - a. Valmont Industries Decorative Traffic Poles – refer to addenda #3

Contract Item No. 5.8: New Signal Pole Foundations

1. Payment for new signal pole foundations will be made for each installed. Bidders will assume a depth of 10' and a 4' diameter foundation. The foundation will have a 6 bolt pattern with 1 ½" bolts. More or less foundation depth will be added by separate pay items.

2. Measurement shall be made by counting each installed and measuring the depth.
3. The unit price bid shall include all labor, materials, tools, equipment and services including, but not limited to:
 - Removal and of existing foundations
 - Geotechnical engineering for foundations
 - Design of new pole foundations based on the pole loading and geotechnical information – design provided by the contractor and stamped by a Virginia licensed engineer.
 - Excavation or boring for foundations
 - All reinforcing
 - All concrete
 - Conduit within the foundation and 1' beyond
 - Furnish and install all materials for new foundations
 - and any other incidental items required for proper installation of the new signal poles.

Contract Item No. 5.9: New Pedestrian Signal Poles

1. Payment for new pedestrian signal poles will be made for each installed. This pay item is only for poles with pedestrian heads.
2. Measurement shall be made by counting each installed.
3. The unit price bid shall include all labor, materials, tools, equipment and services including, but not limited to:
 - Removal and of existing poles
 - All bolts, connectors, fasteners for installation of new poles
 - Furnishing and installation of new poles
 - and any other incidental items required for proper installation of the new signal poles

Contract Item No. 5.10: New Pedestrian Signal Pole Foundations

1. Payment for new pedestrian signal pole foundations will be made for each installed. Bidders will assume a depth of 4' and a 2' diameter foundation.
2. Measurement shall be made by counting each installed and measuring the depth.
3. The unit price bid shall include all labor, materials, tools, equipment and services including, but not limited to:
 - Removal and of existing foundations
 - Geotechnical engineering for foundations

- Excavation or boring for foundations
- Design of new pole foundations based on the pole loading and geotechnical information – design provided by the contractor and stamped by a Virginia licensed engineer.
- Furnish and install all materials for new foundations
- All reinforcing
- All concrete
- Conduit within the foundation and 1' beyond
- and any other incidental items required for proper installation of the new signal poles.

Contract Item Nos. 5.11: Traffic Signal work

1. Payment for furnishing and installing the traffic signal components as specified will be made on a lump sum price.
2. No measurement will be made.
3. The unit price bid shall include all labor, materials, tools, equipment and services including, but not limited to:
 - purchasing, shipping and storing materials
 - installation of material specified
 - testing and quality control
 - and any other incidental items required for proper installation of working traffic signals

Contract Item No. 5.12: 1' Additional Signal Pole Foundation

1. Payment for each additional 1' depth of signal pole beyond the 10' bid.
2. Measurement shall be made by measuring the depth beyond 10'.
3. The unit price bid shall include all labor, materials, tools, equipment and services including, but not limited to:
 - Excavation or boring for foundation
 - Furnish and install all materials for new foundations
 - All reinforcing
 - All concrete
 - Conduit within the foundation
 - and any other incidental items required for proper installation of the new signal poles.
4. The contractor shall provide a unit price for each additional 1' of foundation, but since this is an unknown quantity, no cost will be carried in the bid total, but should the city need to add an additional foundation depth, the change order will be added based on this unit price.

Contract Item No. 5.13: 1' Less Signal Pole Foundation

1. Payment for each reduction of 1' depth of signal pole shorter than the 10' bid.
2. Measurement shall be made by measuring the depth and subtracting it from the 10'.
3. The unit price bid shall include all labor, materials, tools, equipment and services including, but not limited to:
 - Excavation or boring for foundation
 - Furnish and install all materials for new foundations
 - All reinforcing
 - All Concrete
 - and any other incidental items required for proper installation of the new signal poles.
4. The contractor shall provide a unit price for a reduction of 1' of foundation depth. Since this is an unknown quantity, no cost will be carried in the bid total, but should the city need to add an additional foundation depth, the change order will be deducted based on this unit price.

Contract Item No. 5.14: Alternate 3 New Light Poles

1. Payment for new signal poles will be made for each installed.
2. Measurement will be made by counting poles installed.
3. The unit price bid shall include all labor, materials, tools, equipment and services including, but not limited to:
 - Removal and transportation of existing poles
 - Furnishing and installation of new poles
 - and any other incidental items required for proper installation of the new signal poles.
4. Light poles will be Sternberg #5718 DT or equivalent 18 ft ornamental aluminum pole.
5. It is possible this number will be a negative number as the new poles may be less expensive than refurbishing the old poles. In that case, there will be a credit to the owner.

Contract Item No. 6.1: MUTCD Signage

1. Payment for installation of signage as specified will be made at the unit price per each installed.
2. Measurement shall be made by counting signs.
3. The unit price bid shall include all labor, materials, tools, equipment and services including, but not limited to:
 - Fabrication of sign per detail
 - Decorative sign poles
 - Furnish and installation of pole
 - and any other incidental items required for proper installation of signs.